



Erie Conservation District Highlight

This year presented many challenges to the way our operations and the way we approach our daily lives. Along with these challenges came discovery and lessons learned, but if this year taught us anything, it was how to adapt to our ever-changing surroundings. Here at the conservation district, we always prepare our schedules, events and activities with a plan, and also have a contingency ready in case of a "curveball" or two. However, when Plan B turns into Plan C, D or E, one must adapt on the fly. Continuity of Operations Plans (COOP) were developed, revised and revised again. The staff approached communications and technology in new and different ways which allowed us to adapt and continue our service to the community.

Our natural world has been adapting to environmental changes throughout the millennia. Plants and animals acquire structural adaptations such as camouflage for protection from predators, or growing wings for flight. Migration patterns, or advancements in communications within species are examples of behavioral adaptations. Physiological adaptations, including better species intelligence and improvement of the senses have developed over time.

As in our natural world, we too must adapt to our continually changing environment to achieve success and sustain a path to a brighter future. At the conservation district, we continue to adapt to changes presented to us by policy, culture and nature, so that we can maintain a level of integrity for the people we serve.

In Conservation, Tom McClure

VISION STATEMENT

The Erie County Conservation District strives to become a leading conservation organization in Erie County to provide assistance, management, and education for the wise use of our natural resources.

MISSION STATEMENT

Erie County Conservation District is a service based organization providing for the conservation of natural resources and the creation of a healthy environment. We educate local residents, municipalities, landowners, educators, and organizations that are involved with or concerned about wise environmental stewardship.



ENVIRONMENTAL EDUCATION

Educational outreach is a vital component of the Conservation District. Due to the pandemic, Environmental Educator Kristen Currier worked hard to reimagine how experiential and hands-on learning would occur for both scheduled groups and the public. Continuing to focus on conservation and preservation of our soil and water resources, the District was able to continue its outreach, albeit in a remote learning capacity mixed with a lot of cooperation and imagination.

- Hosted the high school county Envirothon for 3 high schools in a virtual setting.
- Completed several in-person programs with local scout groups.
- Created a county-wide BINGO game for the community with a \$200 gift card raffle at the end.
- Hosted monthly themed scavenger hunts througout the summer at Headwaters Park.
- Created an 8 module virtual learning curriculum available free of charge to all Erie County Schools.



8 MODULE CURRICULUM

- 5 SENSES
- WATER JOURNEY
- VERMICOMPOSTING
- TAPWATER TESTING
- MACROINVERTEBRATES
- ANIMAL GRACKS AND CAMOUFLAGE
- HABITATS
- TREE ID

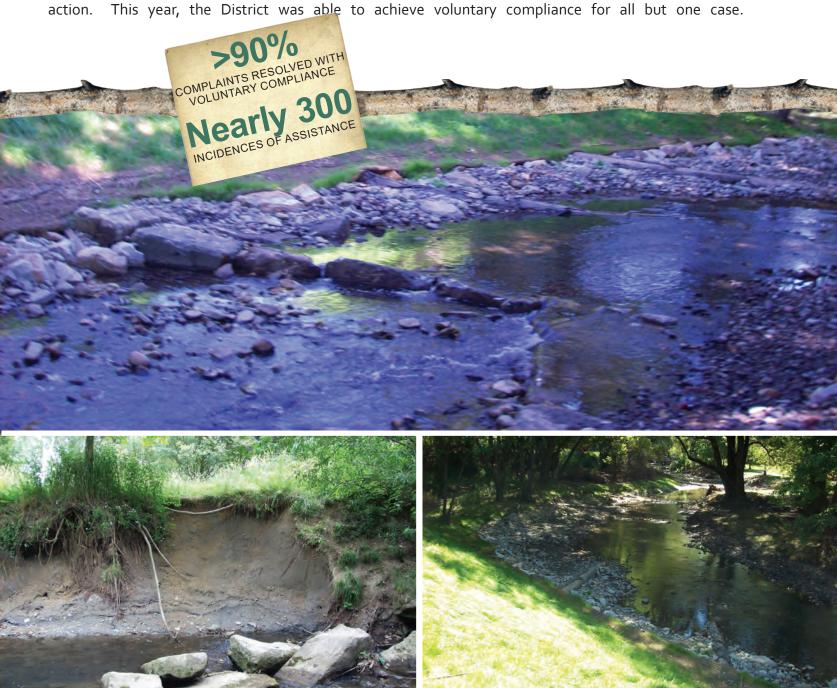
~AVAILABLE NOW ~

CHAPTER 105 – WATERWAY MANAGEMENT PROGRAM

The District's responsibilities under the Chapter 105 Program include initial site investigations of complaints related to potential impacts to regulated waters of the Commonwealth, obtaining voluntary compliance for any on-site violations, providing education and outreach to the community regarding the Chapter 105 rules and regulations, and the processing of the General Permits (GPs) within Erie County.

District technical staff Gene Clemente and Joseph Hudson provide technical and / or administrative assistance to private property owners, state and local officials, design consultants, developers, and contractors on a routine basis. This occurs through either structured training events, or less formal individual meetings. In 2020, nearly 300 individuals were provided assistance.

The District investigated over 20 complaints related to Chapter 105. While the staff attempts to achieve voluntary compliance for any violations found, it is unfortunately not always an option. The District must then forward the case to the Department for enforcement action. This year, the District was able to achieve voluntary compliance for all but one case.



CHAPTER 102

EROSION AND SEDIMENTATION CONTROL AND NPDES PROGRAMS

The District has worked with the PA DEP implementing the Chapter 102 program for well over forty years. Initially the program simply addressed minimizing the potential for off-site sedimentation and similarly, to Waters of the Commonwealth. Since, then, the program has progressed to address maintaining water quality via post construction stormwater, through various Chapter 102 permits.

All earth disturbances, even those that do not require a permit, fall under the scope of Chapter 102, including those associated with agricultural plowing and tilling, timber harvesting, and road maintenance. While the primary Chapter 102 permit processed within the District, and likely most familiar, is the National Pollution Discharge Elimination Systems (NPDES) Permit, the Erosion & Sediment Control (E&S) Permit and Erosion & Sediment Control General Permit (E&SGP-3) also exist. The latter permits address timber harvesting and roadway maintenance, and oil and gas, respectively.



Technical manager Gene Clemente continues to work closely with local municipalities, in relation to local stormwater ordinances, to minimize duplication of efforts and reduce permit processing times. In addition, due to the cooperative efforts with many of the local consultants in the pre-application process, the District's permit processing times remain below the Department's recommended standard.







Driving Surface Aggregate (DSA) Placement on Finn Road - Greenfield Township

Dirt and Gravel Road Program - 2020

There are approximately 550 miles of dirt and gravel roads in Erie County. The maintenance of these road can be a challenge to the municipality and can present potential environmental impacts to our local waterways. The Erie County Conservation District assists municipalities through the Dirt & Gravel Road Program by administering funds to improve road bases, drainage systems and road surfaces.

Dirt & Gravel Road Projects

Road	<u>Municipality</u>	<u>Grant Funds</u>	In-Kind Funds	Total Project Cost
Plum Finn Stewart	Greenfield Township Greenfield Township Concord Township		\$11,989 \$14,586 \$0	\$100,509 \$74,946 \$9,503
	2020 Totals	Grant Funds \$158,383	<u>In-Kind Funds</u> \$26,575	Total Project Cost \$184,958

Plum Road During

Plum Road



1,898
SQ. YDS SEEDING / MULCHING
750
LINEAL FEET OF UNDERDRAIN
372
TONS ROAD FILL ADDED
1
CROSSPIPE INSTALLED

Low Volume Road Program - 2020

The Low Volume Roads program administered locally by the Erie County Conservation District concentrates on road improvement efforts that provide an environmental benefit on paved, concrete or tar and chip roads with a daily traffic count of less than 500 cars. This funding can assist municipalities with drainage and road base issues along with stormwater solutions.







Wheeler Road Culvert

Wheeler Road Bridge Demo

Wheeler Road Inlet

2020 Low Volume Road Projects

<u>Road</u>	<u>Municipality</u>	<u>Grant Funds</u>	<u>In-Kind Funds</u>	<u>Total Project Cost</u>
Quance	McKean Township	\$ 21,747	\$ 13,996	\$ 35,743
Wheeler	Springfield	\$ 55,257	\$ 3,500	\$ 58,757

2020 Totals

Grant Funds \$ 77,004 <u>In-Kind Funds</u> \$ 17,496 <u>Total Project Costs</u>

\$ 94,500

Wheeler Road Before Wheeler Road After



STREAM CROSSING REPLACEMENTS

714

SQUARE YARDS OF NEW ROAD SURFACE

384

TONS OF ROAD FILL ADDED

Stormwater









PA VinES is a voluntary program that promotes sustainable viticulture practices through a grower Self-Assessment Workbook. After the participant completes the workbook, they are eligible to apply for Growing Greener grant funds to install best management practices (BMP's) on their operation, such as streambank stabilization, cover cropping and stabilized access roads. The goal of the program is to reduce the environmental impact of the approximately 10,000 acres of vineyards in the county by limiting the amount of sediments and excess nutrients that enter our Lake Erie tributaries.

challenges Despite the unique presented the VinES program in 2020, expand while Field Technician Nageotte continued to Ryan assisted grape growers in the Lake Erie Watershed in their quest for environmental sustainability.







2020 Program Highlights:

- 1,289 acres of cover crop planted 547' feet of grass diversion installed
- Contact and Outreach List of 80 vineyard owner's.
- 56 PA VinES workbooks delivered to farmers to date
- Several designs completed for 2021 construction



Seedling Sale

Our 2020 Seedling Sale was again a success, despite the sudden impact of COVID. Through quick, thoughtful planning and cooperation with state and local agencies, staff was able to continue our seedling sale and offer pickup of the purchases in a safe and organized manner. Although we were not able to offer day-of purchases as in the past., the sale went smoothly and we were thrilled with the support from the community toward our fundraising efforts. Sales from our seedlings directly benefit our environmental education program, Envirothon, and Headwaters Park. Thank you for your support!





~370
ORDERS FILLED

~12,000 SEEDLINGS SOLD

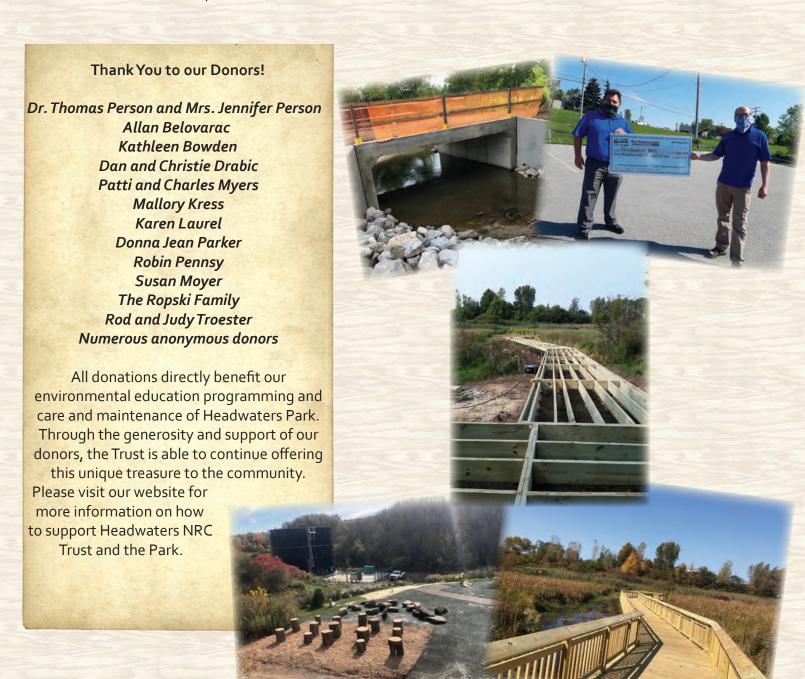
\$6,927.24 PROGRAM PROFIT

HEADWATERS PARK

Headwaters Park altered its outreach in 2020, focusing on reaching out to the public remotely through social media and fun, self-guided activities! As always, the mission to bring conservation and preservation ideas to the public continued through scavenger hunts, photo challenges, and open lines of communication with our patrons. The staff was thrilled to see the new trail expansion, community garden, expanded rain garden, and nature play area open in the fall. Funded through DCNR, DEP, and ECGRA grants, the new areas will be open and available to the public in 2021!

Accomplishments in 2020 include:

- Maintained outreach in Headwaters Park through scavenger hunts and natural challenges
- Completing the trail expansion, rain garden expansion, wetland boardwalk, and Nature Play Area
- Worked with cooperating agencies to host the Erie County Park BINGO game and raffle
- Worked with several Eagle Scouts to add numerous bat houses to the Park and also First Aid information centers to be posted in the Park in 2021









AGRICULTURAL ACTIVITIES

The District has three agriculture programs. They include the Nutrient Management Program (NMP), Manure Management Program (MMP), and the Agricultural Conservation Technical Assistance Program (ACT). These programs provide assistance to farmers and landowners and help meet the goals of the agriculture program at the District. Bethany Fritz, Agriculture Specialist, is available to assist farmers and landowners with their concerns. Several workshops and meetings are also hosted throughout the year as well as one on one assistance.

The Agriculture programs in Erie County provide:

- Assistance with all concerns related to agriculture
- Assistance to farmers with writing their manure management plans
- Assistance to farmers and landowners with nutrient management planning
- Assistance to farmers and landowners with planning and implementing best

management practices (BMP's)

- Technical assistance to minimize soil erosion for landowners and farmers
- Assistance to farmers and landowners with conservation planning



GROWING GREENER GRANT

The District continued to implement Best Management Practices in 2020 using a \$200,000 grant that will end in 2021. Practices that we re installed include: roof runoff with subsurface drainage and ar underground outlet, two heavy use areas, and two animal trails ar d walkways. Work will continue on this grant in 2021. Several projects are planned including a large manure storage, heavy use areas, feeding pad, and trails and walkways.

The District has been very successful with reducing erosion and se liment on properties using the Growing Greener Grant funds ard hope to continue in the future.



John Hallenburg, Jr. - Chairman
Deb Phillips - Vice Chair
Bob Buhl - Treasurer
Amanda Shreve - Secretary
Kathy Dahlkemper - Erie County Executive
Dean Curtis - Farm Director
Francis Surovick - Farm Director
Erin Wincek - Public Director
Bonita Herman - Associate Director
Brian McNamara - Associate Director
Scott Rastetter- County Council Liason
Carl Anderson - County Council Liason - Alternate
John Green - DEP Field Representative

CONSERVATION DISTRICT STAFF 2020

Tom McClure - District Manager
Gene Clemente - Technical Resources Manager
Kristen Currier - Environmental Educator
Bethany Fritz - Agriculture Specialist
Joseph Hudson - Watershed Specialist
Amanda Shreve - Office Manager
Brian Zeppenfeld - Coastal Zone Specialist
Ryan Nageotte - VinES Field Technician





